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NEWS 18	JUL 28	EPFULL enhanced with additional legal status information from the epoline Register
NEWS 19	JUL 28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
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NEWS 23	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS 24	AUG 15	CAplus currency for Korean patents enhanced
NEWS 25	AUG 25	CA/CAplus, CASREACT, and IFI and USPAT databases enhanced for more flexible patent number searching
NEWS 26	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information

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=> e us20080105848/pn
E1            1     US20080105841/PN
E2            1     US20080105847/PN
E3            1 --> US20080105848/PN
E4            2     US20080105849/PN
E5            1     US20080105850/PN
E6            1     US20080105851/PN
E7            1     US20080105852/PN
E8            1     US20080105853/PN
E9            1     US20080105854/PN
E10           6     US20080105855/PN
E11           1     US20080105856/PN
E12           1     US20080105857/PN
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=> s e3;d all
L1            1 US20080105848/PN


L1   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2005:1073675  CAPLUS
DN   143:327475
ED   Entered STN:  07 Oct 2005
TI   Blowing agent fire-resistant composition and its use.
IN   Caron, Laurent
PA   Arkema, Fr.
SO   Fr. Demande, 10 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
IC   ICM  C08J009-04
     ICS  C09K003-30; C11D007-50; C08G018-06; C08G101-00
CC   38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 23
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    -------------------    --------
PI   FR 2868427          A1     20051007    FR 2004-3591           20040406
     FR 2868427          B1     20060908
     WO 2005108478       A1     20051117    WO 2005-FR629          20050316
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     EP 1732977          A1     20061220    EP 2005-739691         20050316
     EP 1732977          B1     20080618
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
     CN 1942513          A      20070404    CN 2005-80011914       20050316
     JP 2007531814       T      20071108    JP 2007-506797         20050316
     AT 398646           T      20080715    AT 2005-739691         20050316
     KR 2007015167       A      20070201    KR 2006-720644         20061002
     US 20080105848      A1     20080508    US 2006-593945         20061006 <--
PRAI FR 2004-3591        A      20040406
     WO 2005-FR629       W      20050316
CLASS
 PATENT NO.      CLASS  PATENT FAMILY CLASSIFICATION CODES
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 FR 2868427      ICM    C08J009-04
                 ICS    C09K003-30; C11D007-50; C08G018-06; C08G101-00
                 IPCI   C08J0009-00 [I,C]; C08G0018-00 [I,C]; C09K0003-30
                        [I,C]; C11D0007-50 [I,C]; C08J0009-04 [I,A];
                        C08G0018-06 [I,A]; C08G0101-00 [N,A]; C09K0003-30
                        [I,A]; C11D0007-50 [I,A]
                 IPCR   C09K0005-00 [I,C*]; C08J0009-14 [I,A]; C09K0005-04
                        [I,A]
                 ECLA   C09K003/30; C09K005/04B4B
 WO 2005108478   IPCI   C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]
                 IPCR   C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C09K0003-30
```

		[I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
	ECLA	C08J009/14H2; C09K003/30; C09K005/04B4B
EP 1732977	IPCI	C08J0009-14 [I,A]; C08J0009-00 [I,C]
	IPCR	C08J0009-00 [I,C]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
	ECLA	C09K003/30; C09K005/04B4B; C08J009/14H2
CN 1942513	IPCI	C08J0009-14 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08J0009-00 [I,C]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
	ECLA	C09K003/30; C09K005/04B4B
JP 2007531814	IPCI	C08G0018-28 [I,A]; C08G0018-00 [I,C*]; C08J0009-14 [I,A]; C08J0009-00 [I,C*]; C09K0005-04 [I,A]; C09K0005-00 [I,C*]; C09K0003-00 [I,A]; C09K0003-30 [I,A]
	IPCR	C08G0018-00 [I,C]; C08G0018-28 [I,A]; C08J0009-00 [I,C]; C08J0009-14 [I,A]; C09K0003-00 [I,A]; C09K0003-00 [I,C]; C09K0003-30 [I,A]; C09K0005-00 [I,C]; C09K0005-04 [I,A]
	FTERM	4F074/AA80; 4F074/AA81; 4F074/BA48; 4F074/BA53; 4J034/CA03; 4J034/CA04; 4J034/CA05; 4J034/CB03; 4J034/CB04; 4J034/CB05; 4J034/CC03; 4J034/DA01; 4J034/DB04; 4J034/DF01; 4J034/DG03; 4J034/DG23; 4J034/HA01; 4J034/HA07; 4J034/HA09; 4J034/HC12; 4J034/HC61; 4J034/HC64; 4J034/HC67; 4J034/HC71; 4J034/MA11; 4J034/NA02; 4J034/QC01
AT 398646	IPCI	C08J0009-00 [I,C]; C08J0009-14 [I,A]
	IPCR	C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
	ECLA	C08J009/14H2; C09K003/30; C09K005/04B4B
KR 2007015167	IPCI	C08K0005-02 [I,A]; C08K0005-00 [I,C*]; C09K0003-30 [I,A]; C09K0005-04 [I,A]; C09K0005-00 [I,C*]
US 20080105848	IPCI	C09K0003-00 [I,A]
	NCL	252/067.000

AB A blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams manufacture comprises 5 - 74 weight% of 1,1,3,3-pentafluorobutane (I), 24 - 93 weight% of trans-1,2-dichloroethylene (II) and 2 - 46 weight% of 1,1,1,3,3-pentafluoropropane (III). A typical composition consists of 100 weight parts of polyol Stepanpol PS2412 and 5 weight parts of a blowing agent (consisting of 33 weight% I, 34 weight% II and 33 weight% III).

ST blowing agent fire resistant polyurethane polyisocyanurate foam; pentafluorobutane dichloroethylene pentafluoropropane blowing agent fire resistant foam

IT Blowing agents
Fire-resistant materials
(blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)

IT Plastic foams
Polyisocyanurates
Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)

IT Hydrocarbons, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(fluoro; blowing agent composition for fire-resistant polyurethane and

polyisocyanurate foams)
IT Polyesters, uses
RL: POF (Polymer in formulation); USES (Uses)
(hydroxy-terminated; blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)
IT 156-60-5, trans-1,2-Dichloroethylene 406-58-6, 1,1,1,3,3-Pentafluorobutane 431-89-0, 1,1,1,2,3,3,3-Heptafluoropropane 460-73-1, 1,1,1,3,3-Pentafluoropropane
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)
IT 439592-40-2, Stepanpol PS 2412
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Shankland, I; US 2003234380 A1 2003 CAPLUS
(2) Singh, R; WO 02099006 A 2002 CAPLUS

=> s 156-60-5 and 406-58-6 and 460-73-1
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L3 880 L2

REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L5 478 L4

REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L7 3173 L6

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L8          10 L7 AND L5 AND L3


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L8   ANSWER 1 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2008:973919  CAPLUS
DN   149:248184
ED   Entered STN:  14 Aug 2008
TI   Nonflammable cleaning compositions comprising fluorinated compounds for
     solid surface and flushing refrigeration apparatus
IN   Marhold, Michael; Rau, Helge; Boerner, Karsten; Meurer, Christoph
PA   Solvay Fluor G.m.b.H., Germany
SO   PCT Int. Appl., 23pp.
     CODEN: PIXXD2
DT   Patent
LA   English
CC   46-6 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     --------------       ----   --------    -------------------     --------
PI   WO 2008095881        A1     20080814    WO 2008-EP51307         20080204
        W:  AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
            CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
            FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
            KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
            ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
            PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
            TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
            IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
            TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
            TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
            AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI EP 2007-101826       A      20070206
     EP 2007-101835       A      20070206
CLASS
 PATENT NO.       CLASS   PATENT FAMILY CLASSIFICATION CODES
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 WO 2008095881    IPCI    C11D0007-50 [I,A]; B01D0012-00 [I,A]; C23G0005-028
                          [I,A]; C23G0005-00 [I,C*]; H01L0021-02 [I,A]
AB   The non-flammable compns. comprises fluorinated compds. selected from
     hydro fluoroalkanes, hydrofluoroalkenes, partially or perfluorinated aromatic
     compds., hydrofluoroethers or fluoroketones, 1,2-dichloroethylene, especially
     trans-1,2-dichloroethylene, and a stabilizer.  These non-flammable compns.
     preferably containing 1,1,1,3,3-pentafluorobutane, can be used especially as
     solvents for cleaning and defluxing electronic components and for
     degreasing metals.  The compns. further may comprise a propellant, e.g.
     1,1,1,2-tetrafluoroethane.  These compns. are especially suitable as flushing
     agent.
ST   pentafluorobutane tetrafluoroethane flushing agent refrigeration app
IT   Detergents
        (cleaning compns.; nonflammable cleaning compns. comprising fluorinated
        compds. for solid surface and flushing refrigeration apparatus)
IT   Alkanes, uses
     Alkenes, uses
     Ketones, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (fluoro; nonflammable cleaning compns. comprising fluorinated compds.
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for solid surface and flushing refrigeration apparatus)
IT Ethers, uses
RL: NUU (Other use, unclassified); USES (Uses)
(fluoroalkyl; nonflammable cleaning compns. comprising fluorinated compds. for solid surface and flushing refrigeration apparatus)
IT Degreasing agents
Printed circuit boards
Refrigerating apparatus
(nonflammable cleaning compns. comprising fluorinated compds. for solid surface and flushing refrigeration apparatus)
IT 156-60-5, trans-1,2-Dichloroethylene 406-58-6, HFC 365mfc 460-73-1, HFC 245fa 811-97-2, HFC 134a 138495-42-8, HFC 43-10mee
RL: NUU (Other use, unclassified); USES (Uses)
(nonflammable cleaning compns. comprising fluorinated compds. for solid surface and flushing refrigeration apparatus)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Allied Signal Inc; WO 9935209 A 1999 CAPLUS
(2) Du Pont; WO 0017301 A 2000 CAPLUS
(3) Du Pont; WO 2005118754 A 2005 CAPLUS
(4) Illinois Tool Works; EP 1403361 A 2004
(5) Minnesota Mining & Mf G; WO 9837163 A 1998 CAPLUS
(6) Nappa Mario J; US 20060266975 A1 2006
(7) Pham; WO 02099006 A 2002 CAPLUS
(8) Solvay; EP 0653484 A1 1995 CAPLUS

L8 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:561349 CAPLUS
DN 146:523109
ED Entered STN: 24 May 2007
TI Method of molding rigid polyurethane foams with enhanced thermal conductivity
IN De Vos, Hans A. G.; Parenti, Vanni
PA Dow Global Technologies Inc., USA
SO PCT Int. Appl., 33pp.
CODEN: PIXXD2
DT Patent
LA English
CC 38-3 (Plastics Fabrication and Uses)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007058793	A1	20070524	WO 2006-US42979	20061103
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	AU 2006315842	A1	20070524	AU 2006-315842	20061103
	CA 2629090	A1	20070524	CA 2006-2629090	20061103
	EP 1951777	A1	20080806	EP 2006-827462	20061103
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	KR 2008077176	A	20080821	KR 2008-714209	20080613

PRAI US 2005-736247P P 20051114
WO 2006-US42979 W 20061103

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2007058793	IPCI	C08G0018-08 [I,A]; C08G0018-00 [I,C*]; C08J0009-12 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08G0018-00 [I,C]; C08G0018-08 [I,A]; C08J0009-00 [I,C]; C08J0009-12 [I,A]
	ECLA	C08G018/76D2; C08G018/48A8; C08G018/48D; M08G; M08G
AU 2006315842	IPCI	C08G0018-00 [I,C]; C08G0018-08 [I,A]; C08J0009-00 [I,C]; C08J0009-12 [I,A]
	ECLA	C08G018/76D2; C08G018/48A8; C08G018/48D; M08G; M08G
CA 2629090	IPCI	C08G0018-08 [I,A]; C08G0018-00 [I,C*]; C08J0009-12 [I,A]; C08J0009-00 [I,C*]
EP 1951777	IPCI	C08G0018-08 [I,A]; C08G0018-00 [I,C*]; C08J0009-12 [I,A]; C08J0009-00 [I,C*]
KR 2008077176	IPCI	C08G0018-08 [I,A]; C08G0018-00 [I,C*]; C08J0009-12 [I,A]; C08J0009-00 [I,C*]

AB The molded rigid polyurethane foam for application in appliance, has reduced thermal conductivity at d. 33-38 kg/m3. The molded rigid polyurethane foam is obtained by injecting into a closed mold cavity under reduced pressure a reaction mixture at packing factor 1.1-1.9, wherein the reaction mixture comprises(A) an organic polyisocyanate; (B) a phys. blowing agent, (C) a polyol composition containing ≥1 polyol with functionality ≥3 and hydroxyl number 200-800, (D) 0-2.5% water; (E) a catalyst and (F) auxiliary substances and/or additives.

ST polyurethane foam rigid reduced thermal cond

IT Hydrocarbons, uses
RL: NUU (Other use, unclassified); USES (Uses)
(chlorofluorocarbons, blowing agent; method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)

IT Hydrocarbons, uses
RL: NUU (Other use, unclassified); USES (Uses)
(fluoro, blowing agent; method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(foam; method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)

IT Appliances
Blowing agents
Polymerization catalysts
Thermal insulators
(method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)

IT Molded plastics, uses
Plastic foams
RL: TEM (Technical or engineered material use); USES (Uses)
(method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyester-polyoxyalkylene-, foam; method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyoxyalkylene-, foam; method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)
IT 78-78-4, Isopentane 106-97-8, n-Butane, uses 107-31-3, Methyl formate 110-82-7, Cyclohexane, uses 156-60-5 287-92-3, Cyclopentane 406-58-6, HFC 365mfc 431-89-0, HFC 227 460-73-1, HFC 245fa 7732-18-5, Water, uses
RL: NUU (Other use, unclassified); USES (Uses)
(blowing agent; method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)
IT 936846-36-5P 937040-61-4P 937040-62-5P 937040-63-6P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(foam; method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)
IT 90-72-2, Dabco TMR 30 98-94-2, Polycat 8 3030-47-5, Polycat 5
RL: CAT (Catalyst use); USES (Uses)
(method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)
IT 109-66-0, n-Pentane, uses
RL: NUU (Other use, unclassified); USES (Uses)
(method of molding rigid polyurethane foams with enhanced thermal conductivity for appliance)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Elastogran Gmbh; EP 0708127 A2 1996 CAPLUS
(2) Lunardon Gianflavio; US 5530033 A 1996 CAPLUS
(3) Slaats, M; US 3970732 A1 1976

L8 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:17507 CAPLUS
DN 146:102023
ED Entered STN: 05 Jan 2007
TI Process for preparation of molded polyurethane articles
IN Enaux, Vincent; Debien, Christian Geert Marie Ghislain
PA Arkema, Fr.
SO Fr. Demande, 11pp.
CODEN: FRXXBL
DT Patent
LA French
CC 38-3 (Plastics Fabrication and Uses)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2887889	A1	20070105	FR 2005-6626	20050629
	FR 2887889	B1	20070831		
	WO 2007003726	A1	20070111	WO 2006-FR1116	20060518
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1904562	A1	20080402	EP 2006-764642	20060518
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				

IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

	CN 101223220	A	20080716	CN 2006-80026268	20080118
PRAI	FR 2005-6626	A	20050629		
	WO 2006-FR1116	W	20060518		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
FR 2887889	IPCI	C08G0018-08 [I,A]; C08G0018-00 [I,C*]; C08J0009-14 [I,A]; C08J0009-34 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08G0018-00 [I,C]; C08G0018-08 [I,A]; C08J0009-00 [I,C]; C08J0009-14 [I,A]; C08J0009-34 [I,A]
	ECLA	C08J009/34+L75/04; C08J009/14P+L75/04
WO 2007003726	IPCI	C08J0009-14 [I,A]; C08J0009-34 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08J0009-00 [I,C]; C08J0009-14 [I,A]; C08J0009-34 [I,A]
	ECLA	C08J009/34+L75/04; C08J009/14P+L75/04
EP 1904562	IPCI	C08J0009-14 [I,A]; C08J0009-34 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08J0009-00 [I,C]; C08J0009-14 [I,A]; C08J0009-34 [I,A]
CN 101223220	IPCI	C08J0009-14 [I,A]; C08J0009-34 [I,A]; C08J0009-00 [I,C*]

AB The invention relates to a method of preparation of articles molded out of polyurethane, which have a cellular core and a skin layer with a certain hardness, and to foams prepared by this method. The invention also has an aim at premixing a functional composition which is reactive with isocyanates.

ST polyurethane foam molding

IT Hydrocarbons, uses
RL: NUU (Other use, unclassified); USES (Uses)
(fluoro, blowing agent; process for preparation of molded polyurethane articles)

IT Blowing agents
(process for preparation of molded polyurethane articles)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(process for preparation of molded polyurethane articles)

IT Plastic foams
RL: TEM (Technical or engineered material use); USES (Uses)
(process for preparation of molded polyurethane articles)

IT 156-60-5 406-58-6, 1,1,1,3,3-Pentafluorobutane 431-89-0, 1,1,1,2,3,3,3-Heptafluoropropane 460-73-1, 1,1,1,3,3-Pentafluoropropane
RL: NUU (Other use, unclassified); USES (Uses)
(blowing agent; process for preparation of molded polyurethane articles)

IT 917967-44-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(process for preparation of molded polyurethane articles)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Atofina Chemicals Inc; EP 1435371 A 2004 CAPLUS
(2) Bogdan, M; US 2003050356 A1 2003 CAPLUS
(3) Bogdan, M; US 6764990 B1 2004 CAPLUS
(4) Honeywell International Inc; WO 03078539 A 2003 CAPLUS
(5) Wu, J; US 6793845 B1 2004 CAPLUS

L8 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1073675 CAPLUS

DN 143:327475

ED Entered STN: 07 Oct 2005

TI Blowing agent fire-resistant composition and its use.

IN Caron, Laurent

PA Arkema, Fr.
SO Fr. Demande, 10 pp.
CODEN: FRXXBL
DT Patent
LA French
IC ICM C08J009-04
ICS C09K003-30; C11D007-50; C08G018-06; C08G101-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 23

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2868427	A1	20051007	FR 2004-3591	20040406
	FR 2868427	B1	20060908		
	WO 2005108478	A1	20051117	WO 2005-FR629	20050316
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1732977	A1	20061220	EP 2005-739691	20050316
	EP 1732977	B1	20080618		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	CN 1942513	A	20070404	CN 2005-80011914	20050316
	JP 2007531814	T	20071108	JP 2007-506797	20050316
	AT 398646	T	20080715	AT 2005-739691	20050316
	KR 2007015167	A	20070201	KR 2006-720644	20061002
	US 20080105848	A1	20080508	US 2006-593945	20061006
PRAI	FR 2004-3591	A	20040406		
	WO 2005-FR629	W	20050316		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
FR 2868427	ICM	C08J009-04
	ICS	C09K003-30; C11D007-50; C08G018-06; C08G101-00
	IPCI	C08J0009-00 [I,C]; C08G0018-00 [I,C]; C09K0003-30 [I,C]; C11D0007-50 [I,C]; C08J0009-04 [I,A]; C08G0018-06 [I,A]; C08G0101-00 [N,A]; C09K0003-30 [I,A]; C11D0007-50 [I,A]
	IPCR	C09K0005-00 [I,C*]; C08J0009-14 [I,A]; C09K0005-04 [I,A]
	ECLA	C09K003/30; C09K005/04B4B
WO 2005108478	IPCI	C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
	ECLA	C08J009/14H2; C09K003/30; C09K005/04B4B
EP 1732977	IPCI	C08J0009-14 [I,A]; C08J0009-00 [I,C]
	IPCR	C08J0009-00 [I,C]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
	ECLA	C09K003/30; C09K005/04B4B; C08J009/14H2
CN 1942513	IPCI	C08J0009-14 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08J0009-00 [I,C]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*];

		C09K0005-04 [I,A]
	ECLA	C09K003/30; C09K005/04B4
JP 2007531814	IPCI	C08G0018-28 [I,A]; C08G0018-00 [I,C*]; C08J0009-14 [I,A]; C08J0009-00 [I,C*]; C09K0005-04 [I,A]; C09K0005-00 [I,C*]; C09K0003-00 [I,A]; C09K0003-30 [I,A]
	IPCR	C08G0018-00 [I,C]; C08G0018-28 [I,A]; C08J0009-00 [I,C]; C08J0009-14 [I,A]; C09K0003-00 [I,C]; C09K0003-00 [I,A]; C09K0003-30 [I,C]; C09K0003-30 [I,A]; C09K0005-00 [I,C]; C09K0005-04 [I,A]
	FTERM	4F074/AA80; 4F074/AA81; 4F074/BA48; 4F074/BA53; 4J034/CA03; 4J034/CA04; 4J034/CA05; 4J034/CB03; 4J034/CB04; 4J034/CB05; 4J034/CC03; 4J034/DA01; 4J034/DB04; 4J034/DF01; 4J034/DG03; 4J034/DG23; 4J034/HA01; 4J034/HA07; 4J034/HA09; 4J034/HC12; 4J034/HC61; 4J034/HC64; 4J034/HC67; 4J034/HC71; 4J034/MA11; 4J034/NA02; 4J034/QC01
AT 398646	IPCI	C08J0009-00 [I,C]; C08J0009-14 [I,A]
	IPCR	C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
	ECLA	C08J009/14H2; C09K003/30; C09K005/04B4B
KR 2007015167	IPCI	C08K0005-02 [I,A]; C08K0005-00 [I,C*]; C09K0003-30 [I,A]; C09K0005-04 [I,A]; C09K0005-00 [I,C*]
US 20080105848	IPCI	C09K0003-00 [I,A]
	NCL	252/067.000

AB A blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams manufacture comprises 5 - 74 weight% of 1,1,3,3-pentafluorobutane (I), 24 - 93 weight% of trans-1,2-dichloroethylene (II) and 2 - 46 weight% of 1,1,1,3,3-pentafluoropropane (III). A typical composition consists of 100 weight parts of polyol Stepanpol PS2412 and 5 weight parts of a blowing agent (consisting of 33 weight% I, 34 weight% II and 33 weight% III).

ST blowing agent fire resistant polyurethane polyisocyanurate foam; pentafluorobutane dichloroethylene pentafluoropropane blowing agent fire resistant foam

IT Blowing agents
Fire-resistant materials
(blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)

IT Plastic foams
Polyisocyanurates
Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)

IT Hydrocarbons, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(fluoro; blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)

IT Polyesters, uses
RL: POF (Polymer in formulation); USES (Uses)
(hydroxy-terminated; blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)

IT 156-60-5, trans-1,2-Dichloroethylene 406-58-6, 1,1,1,3,3-Pentafluorobutane 431-89-0, 1,1,1,2,3,3,3-Heptafluoropropane 460-73-1, 1,1,1,3,3-Pentafluoropropane
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(blowing agent composition for fire-resistant polyurethane and

polyisocyanurate foams)
IT 439592-40-2, Stepanpol PS 2412
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(blowing agent composition for fire-resistant polyurethane and polyisocyanurate foams)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Shankland, I; US 2003234380 A1 2003 CAPLUS
(2) Singh, R; WO 02099006 A 2002 CAPLUS

L8 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:772764 CAPLUS
DN 141:261651
ED Entered STN: 22 Sep 2004
TI Foam premixes having improved processability
IN Wu, Jinhuang; Caron, Laurent S. J.
PA Atofina Chemicals, Inc., USA
SO U.S., 2 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM C08G018-00
ICS C08G018-08; C08K003-00
INCL 252182240; 510412000; 510415000; 516012000; 521131000; 521098000
CC 38-2 (Plastics Fabrication and Uses)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6793845	B1	20040921	US 2003-420472	20030422
	CA 2459668	A1	20041022	CA 2004-2459668	20040304
	EP 1471102	A1	20041027	EP 2004-5508	20040308
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
	BR 2004000731	A	20050111	BR 2004-731	20040322
	JP 2004323831	A	20041118	JP 2004-103483	20040331
	CN 1550514	A	20041201	CN 2004-10035158	20040420
	MX 2004PA03818	A	20050425	MX 2004-PA3818	20040422
	US 20050009932	A1	20050113	US 2004-910814	20040803
	US 7098254	B2	20060829		
	US 20060281826	A1	20061214	US 2006-508440	20060823
PRAI	US 2003-420472	A	20030422		
	US 2004-910814	A1	20040803		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6793845	ICM	C08G018-00
	ICS	C08G018-08; C08K003-00
	INCL	252182240; 510412000; 510415000; 516012000; 521131000; 521098000
	IPCI	C08G0018-00 [ICM,7]; C08G0018-08 [ICS,7]; C08K0003-00 [ICS,7]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0018-08 [I,A]; C08G0018-40 [I,A]; C08J0009-00 [I,A]; C08J0009-04 [I,A]; C08J0009-228 [I,A]; C08K0003-00 [I,C*]; C08K0003-00 [I,A]; C08L0075-00 [I,C*]; C08L0075-04 [I,A]
	NCL	252/182.240; 510/412.000; 510/415.000; 516/012.000; 521/098.000; 521/131.000
	ECLA	C08J009/14H2+L75/04; C08J009/14P+L75/04
CA 2459668	IPCI	C08J0009-228 [ICM,7]; C08J0009-00 [ICM,7,C*]

	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0018-08 [I,A]; C08G0018-40 [I,A]; C08J0009-00 [I,A]; C08J0009-04 [I,A]; C08J0009-228 [I,A]; C08K0003-00 [I,C*]; C08K0003-00 [I,A]; C08L0075-00 [I,C*]; C08L0075-04 [I,A]
	ECLA	C08J009/14H2+L75/04; C08J009/14P+L75/04
EP 1471102	IPCI	C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]; C08L0075-04 [ICS,7]; C08L0075-00 [ICS,7,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0018-08 [I,A]; C08G0018-40 [I,A]; C08J0009-00 [I,A]; C08J0009-04 [I,A]; C08J0009-228 [I,A]; C08K0003-00 [I,C*]; C08K0003-00 [I,A]; C08L0075-00 [I,C*]; C08L0075-04 [I,A]
	ECLA	C08J009/14H2+L75/04; C08J009/14P+L75/04
BR 2004000731	IPCI	C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0018-08 [I,A]; C08G0018-40 [I,A]; C08J0009-00 [I,A]; C08J0009-04 [I,A]; C08J0009-228 [I,A]; C08K0003-00 [I,C*]; C08K0003-00 [I,A]; C08L0075-00 [I,C*]; C08L0075-04 [I,A]
	ECLA	C08J009/14H2+L75/04; C08J009/14P+L75/04
JP 2004323831	IPCI	C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]; C08L0075-04 [ICS,7]; C08L0075-00 [ICS,7,C*]
	IPCR	C08G0018-00 [I,A]; C08G0018-00 [I,C*]; C08G0018-08 [I,A]; C08G0018-40 [I,A]; C08J0009-00 [I,C*]; C08J0009-04 [I,A]; C08J0009-14 [I,A]; C08J0009-228 [I,A]; C08K0003-00 [I,A]; C08K0003-00 [I,C*]; C08L0075-00 [I,C*]; C08L0075-04 [I,A]
	FTERM	4F074/AA78; 4F074/AA81; 4F074/BA42; 4F074/BA45; 4F074/BA53; 4F074/BA95; 4F074/CA21
CN 1550514	IPCI	C08J0009-04 [ICM,7]; C08J0009-00 [ICM,7,C*]; C08G0018-40 [ICS,7]; C08G0018-00 [ICS,7,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0018-08 [I,A]; C08G0018-40 [I,A]; C08J0009-00 [I,A]; C08J0009-04 [I,A]; C08J0009-228 [I,A]; C08K0003-00 [I,C*]; C08K0003-00 [I,A]; C08L0075-00 [I,C*]; C08L0075-04 [I,A]
	ECLA	C08J009/14H2+L75/04; C08J009/14P+L75/04
MX 2004PA03818	IPCI	C08J0009-00 [ICM,7]
US 20050009932	IPCI	C08J0009-14 [I,A]; C08J0009-00 [I,C*]; C08G0018-00 [I,A]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0018-08 [I,A]; C08G0018-40 [I,A]; C08J0009-00 [I,A]; C08J0009-04 [I,A]; C08J0009-228 [I,A]; C08K0003-00 [I,C*]; C08K0003-00 [I,A]; C08L0075-00 [I,C*]; C08L0075-04 [I,A]
	NCL	516/010.000; 516/012.000; 521/131.000; 521/098.000
	ECLA	C08J009/14H2+L75/04; C08J009/14P+L75/04
US 20060281826	IPCI	C08G0018-48 [I,A]; C08G0018-00 [I,C*]
	IPCR	C08G0018-00 [I,C]; C08G0018-48 [I,A]
	NCL	521/131.000
	ECLA	M08G

AB The processability of a foam premix containing hydrofluorocarbons and/or pentane-based blowing agents in polyols, e.g., polyester polyols, is improved by adding trans-1,2-dichloroethylene to the premix in an amount effective to enhance the processability.

ST polyurethane foam processability dichloroethylene additive; blowing agent

pentane hydrofluorocarbon polyurethane foam processability; polyester polyol polyurethane foam processability dichloroethylene additive

IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(cellular; foam premixes having improved processability contain dichloroethylene)

IT Hydrocarbons, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluoro, blowing agents; foam premixes having improved processability contain dichloroethylene and)

IT Plastic foams
RL: TEM (Technical or engineered material use); USES (Uses)
(foam premixes having improved processability contain hydrofluorocarbons and dichloroethylene)

IT Blowing agents
(foam premixes having improved processability contain hydrofluorocarbons and dichloroethylene as)

IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(hydroxy-terminated, foam components; foam premixes having improved processability contain hydrofluorocarbons and dichloroethylene as)

IT 78-78-4, Isopentane 109-66-0, Pentane, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(blowing agent; foam premixes having improved processability contain dichloroethylene and)

IT 406-58-6, 1,1,1,3,3-Pentafluorobutane 460-73-1, 1,1,1,3,3-Pentafluoropropane 811-97-2, 1,1,1,2-Tetrafluoroethane
RL: TEM (Technical or engineered material use); USES (Uses)
(foam premixes having improved processability contain dichloroethylene and)

IT 156-60-5, trans-1,2-Dichloroethylene
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(foam premixes having improved processability contain hydrofluorocarbons and)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Harris; US 20020061935 A1 2002
(2) Harris; US 6472444 B1 2002 CAPLUS
(3) Merchant; US 5196137 A 1993 CAPLUS
(4) Werner; US 5723509 A 1998 CAPLUS

L8 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:550720 CAPLUS
DN 141:89880
ED Entered STN: 09 Jul 2004
TI Blowing agent blends containing trans-1,2-dichloroethylene and hydrofluorocarbons
IN Galaton, Steve M.; Bertelo, Christopher
PA USA
SO U.S. Pat. Appl. Publ., 3 pp., Cont.-in-part of U.S. Pat. Appl. 2004 132,631.
CODEN: USXXCO
DT Patent
LA English
IC ICM C11D017-00
INCL 510407000; 510412000
CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): 38
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	US 20040132632	A1	20040708	US 2003-396747	20030325	
	US 7144926	B2	20061205			
	US 20040132631	A1	20040708	US 2003-336368	20030102	
	CA 2452737	A1	20040702	CA 2003-2452737	20031209	
	MX 2003PA11741	A	20040723	MX 2003-PA11741	20031217	
	JP 2004211081	A	20040729	JP 2003-420691	20031218	
	BR 2003005963	A	20040914	BR 2003-5963	20031222	
	EP 1435371	A1	20040707	EP 2003-293344	20031229	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
	CN 1515607	A	20040728	CN 2003-10124553	20031231	
PRAI	US 2003-336368	A2	20030102			
	US 2003-396747	A	20030325			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20040132632	ICM	C11D017-00
	INCL	510407000; 510412000
	IPCI	C08J0009-14 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]
	NCL	510/407.000; 510/412.000; 521/131.000; 252/067.000; 252/364.000; 510/408.000; 510/415.000; 510/470.000; 516/012.000; 521/155.000; 521/170.000
	ECLA	C08J009/14H2; C08J009/14H2+L75/04
US 20040132631	IPCI	C11D0017-00 [ICM,7]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]
	NCL	510/407.000
CA 2452737	IPCI	C08L0075-04 [ICM,7]; C08L0075-00 [ICM,7,C*]; C08K0005-02 [ICS,7]; C08K0005-00 [ICS,7,C*]; C08J0009-228 [ICS,7]; C08J0009-00 [ICS,7,C*]; C08G0018-32 [ICS,7]; C08G0018-72 [ICS,7]; C08G0018-00 [ICS,7,C*]
	IPCR	C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0101-00 [N,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]
MX 2003PA11741	IPCI	C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]
JP 2004211081	IPCI	C08G0018-00 [ICM,7]; C08J0009-14 [ICS,7]; C08J0009-00 [ICS,7,C*]; C08G0101-00 [ICS,7]; C08L0101-00 [ICS,7]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]
	FTERM	4F074/AA78; 4F074/BA43; 4F074/BA53; 4F074/BA95; 4F074/CA21; 4F074/CC04Y; 4F074/DA18; 4F074/DA32; 4J034/DA01; 4J034/DB03; 4J034/HA01; 4J034/HA07; 4J034/NA02; 4J034/QB17; 4J034/QC01
BR 2003005963	IPCI	C08K0005-02 [ICM,7]; C08K0005-00 [ICM,7,C*]; C08J0009-20 [ICS,7]; C08J0009-00 [ICS,7,C*]; C08G0071-04 [ICS,7]; C08G0071-00 [ICS,7,C*]
	IPCR	C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0101-00 [N,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]
EP 1435371	IPCI	C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]; C08L0075-04 [ICS,7]; C08L0075-00 [ICS,7,C*]
	IPCR	C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0101-00 [N,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]
CN 1515607	IPCI	C08K0005-02 [ICM,7]; C08K0005-00 [ICM,7,C*]; C08J0009-14 [ICS,7]; C08J0009-00 [ICS,7,C*]
	IPCR	C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0101-00 [N,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]
	ECLA	C08J009/14H2; C08J009/14H2+L75/04

AB The hydrofluorocarbon-based foam blowing agent blends comprise trans-1,2-dichloroethylene and one or more hydrofluorocarbons such as 1,1,1,3,3-pentafluoropropane, 1,1,1,3,3-pentafluorobutane, and 1,1,1,2-tetrafluoroethane. The resulting foams exhibit dramatic improvement in fire performance. Thus, a foam sample with excellent fire performance was produced from a composition containing Desmodur 44V70 156.3,

Stepanpol PS 2412 100, Polycat 5 0.17, K 15 2.71, B 8465 2, trans-1
,2-dichloroethylene 2.85, and ,1,1,3,3-pentafluoropropane (HFC 245fa)
35.46 parts.
ST blowing agent trans dichloroethylene hydrofluorocarbon
IT Hydrocarbons, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fluoro, blowing agent; production of blowing agent blends containing
trans-1,2-dichloroethylene and hydrofluorocarbons)
IT Blowing agents
Fire-resistant materials
(production of blowing agent blends containing trans-1,2-dichloroethylene
and
hydrofluorocarbons)
IT Polyurethanes, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(production of blowing agent blends containing trans-1,2-dichloroethylene
and
hydrofluorocarbons)
IT Plastic foams
RL: TEM (Technical or engineered material use); USES (Uses)
(production of blowing agent blends containing trans-1,2-dichloroethylene
and
hydrofluorocarbons)
IT 156-60-5, trans-1,2-Dichloroethylene 406-58-6,
1,1,1,3,3-Pentafluorobutane 460-73-1, 1,1,1,3,3-
Pentafluoropropane 811-97-2, 1,1,1,2-Tetrafluoroethane
RL: MOA (Modifier or additive use); USES (Uses)
(blowing agent; production of blowing agent blends containing
trans-1,2-dichloroethylene and hydrofluorocarbons)
IT 439592-42-4P, Desmodur 44V70-Stepanpol PS 2412 copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(production of blowing agent blends containing trans-1,2-dichloroethylene
and
hydrofluorocarbons)
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; EP 0527019 1999
(2) Anon; WO 9935209 1999 CAPLUS
(3) Barthelemy; US 5478492 A 1995 CAPLUS
(4) Bogdan; US 6790820 B1 2004 CAPLUS
(5) Fitzgerald; US 6746998 B1 2004
(6) Hitters; US 20030141481 A1 2003 CAPLUS
(7) Knopeck; US 20030234380 A1 2003 CAPLUS
(8) Merchant; US 5194170 A 1993 CAPLUS
(9) Merchant; US 5196137 A 1993 CAPLUS
(10) Singh; US 6455601 B1 2002 CAPLUS
(11) Swan; US 5126067 A 1992 CAPLUS
(12) VON Bonin; US 4024090 A 1977 CAPLUS

L8 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:545719 CAPLUS
DN 141:89878
ED Entered STN: 08 Jul 2004
TI Blowing agent blends containing trans-1,2-dichloroethylene and
hydrofluorocarbons
IN Galaton, Steven Marc; Bertelo, Christopher Anthony
PA Atofina Chemicals, Inc., USA
SO Eur. Pat. Appl., 6 pp.

CODEN: EPXXDW
DT Patent
LA English
IC ICM C08J009-14
ICS C08L075-04
CC 37-2 (Plastics Manufacture and Processing)
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1435371	A1	20040707	EP 2003-293344	20031229
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 20040132631	A1	20040708	US 2003-336368	20030102
US 20040132632	A1	20040708	US 2003-396747	20030325
US 7144926	B2	20061205		
PRAI US 2003-336368	A	20030102		
US 2003-396747	A	20030325		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1435371	ICM	C08J009-14
	ICS	C08L075-04
	IPCI	C08J0009-14 [ICM,7]; C08J0009-00 [ICM,7,C*]; C08L0075-04 [ICS,7]; C08L0075-00 [ICS,7,C*]
	IPCR	C08G0018-00 [I,C*]; C08G0018-00 [I,A]; C08G0101-00 [N,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]
US 20040132631	IPCI	C11D0017-00 [ICM,7]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]
	NCL	510/407.000
US 20040132632	IPCI	C08J0009-14 [I,A]; C08J0009-00 [I,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]
	NCL	510/407.000; 510/412.000; 521/131.000; 252/067.000; 252/364.000; 510/408.000; 510/415.000; 510/470.000; 516/012.000; 521/155.000; 521/170.000
	ECLA	C08J009/14H2; C08J009/14H2+L75/04

AB The hydrofluorocarbon-based foam blowing agent blends comprise trans-1,2-dichloroethylene and one or more hydrofluorocarbons such as 1,1,1,3,3-pentafluoropropane, 1,1,1,3,3-pentafluorobutane, and 1,1,1,2-tetrafluoroethane. The resulting foams exhibit dramatic improvement in fire performance. Thus, a foam sample with excellent fire performance was produced from Desmodur 44V70 156.3, Stepanpol PS 2412 100, Polycat 5 0.17, K 15 2.71, B 8465 2, trans-1 ,2-dichloroethylene 2.85, and ,1,1,3,3-pentafluoropropane (HFC 245fa) 35.46 parts.

ST blowing agent trans dichloroethylene hydrofluorocarbon

IT Hydrocarbons, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fluoro, blowing agent; production of blowing agent blends containing trans-1,2-dichloroethylene and hydrofluorocarbons)

IT Blowing agents
Fire-resistant materials
(production of blowing agent blends containing trans-1,2-dichloroethylene and hydrofluorocarbons)

IT Polyurethanes, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of blowing agent blends containing trans-1,2-dichloroethylene and hydrofluorocarbons)

IT Plastic foams
RL: TEM (Technical or engineered material use); USES (Uses)

(production of blowing agent blends containing trans-1,2-dichloroethylene and
hydrofluorocarbons)
IT 156-60-5 406-58-6, 1,1,1,3,3-Pentafluorobutane
460-73-1, 1,1,1,3,3-Pentafluoropropane 811-97-2,
1,1,1,2-Tetrafluoroethane
RL: MOA (Modifier or additive use); USES (Uses)
(blowing agent; production of blowing agent blends containing
trans-1,2-dichloroethylene and hydrofluorocarbons)
IT 439592-42-4P, Desmodur 44V70-Stepanpol PS 2412 copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(production of blowing agent blends containing trans-1,2-dichloroethylene and
hydrofluorocarbons)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Honeywell Int Inc; WO 03051968 A 2003 CAPLUS
(2) Merchant, A; US 5194170 A 1993 CAPLUS
(3) Merchant, A; US 5196137 A 1993 CAPLUS
(4) Singh, R; WO 02099006 A 2002 CAPLUS

L8 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:4726 CAPLUS
DN 141:226487
ED Entered STN: 05 Jan 2004
TI Trans-1,2-dichloroethylene for improving fire performance of urethane foam
AU Wu, Jinhuang; Bertelo, Christopher; Caron, Laurent
CS ATOFINA Chemicals, Inc., King of Prussia, PA, 19406, USA
SO Conference Proceedings - Polyurethanes Expo, Orlando, FL, United States, Oct. 1-3, 2003 (2003), 454-462 Publisher: Alliance for the Polyurethanes Industry, Arlington, Va.
CODEN: 69EXJX
DT Conference
LA English
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 37
AB In the United States, HCFC-141b was phased out of urethane foam applications on Jan. 1, 2003. Zero ozone depletion-potential (ODP) alternatives such as hydrofluorocarbons (HFCs) and hydrocarbons (normal pentane, iso-pentane and cyclopentane) were introduced to replace HCFC-141b. However, none of these alternatives can match the performance of HCFC-141b in terms of handling, economics, and overall final product performance. In particular, the fire performance of hydrocarbon-based foams cannot reach the performance previously achieved with HCFC-141b. Trans-1,2-dichloroethylene is a liquid at room temperature (b.p. 48°). It does not deplete the ozone layer, and it has very low global warming potential (GWP) because it has very short atmospheric lifetime. The authors have recently reported that when trans-1,2-dichloroethylene is used in urethane foams with hydrocarbons, it could improve the fire performance of the foams based on a small-scale fire test (Mobil 45). They report phys. properties such as dimensional stability and compressive strength of hydrocarbon/trans-1,2-dichloroethylene-based foams. They have also extended the studies of the use of trans-1,2-dichloroethylene and they report on the fire performance and phys. properties of HFC blown urethane foams incorporating trans-1,2-dichloroethylene.
ST hydrocarbon trans dichloroethylene blown urethane foam flammability improved; hydrofluorocarbon trans dichloroethylene blown urethane foam flammability improved
IT Polyurethanes, uses

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cellular; nonozone depleting blowing agents with trans-1,2-dichloroethylene for improving fire performance of urethane foam)
IT Blowing agents
Compressive strength
Fireproofing agents
Flammability
Thermal insulation foams
(nonozone depleting blowing agents with trans-1,2-dichloroethylene for improving fire performance of urethane foam)
IT Hydrocarbons, uses
RL: MOA (Modifier or additive use); USES (Uses)
(nonozone depleting blowing agents with trans-1,2-dichloroethylene for improving fire performance of urethane foam)
IT Polymer degradation
(thermal; nonozone depleting blowing agents with trans-1,2-dichloroethylene for improving fire performance of urethane foam)
IT 156-60-5, trans-1,2-Dichloroethylene
RL: MOA (Modifier or additive use); USES (Uses)
(nonozone depleting blowing agents with trans-1,2-dichloroethylene for improving fire performance of urethane foam)
IT 192648-01-4P, Mondur 489-STEPANPol PS 2352 copolymer 439592-42-4P, DESMODUR 44V70-STEPANPOL PS 2412 copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(nonozone depleting blowing agents with trans-1,2-dichloroethylene for improving fire performance of urethane foam)
IT 78-78-4, Isopentane 109-66-0, n-Pentane, uses 287-92-3, Cyclopentane 406-58-6, HFC-365mfc 460-73-1, HFC-245fa 745816-72-2, Hydrosol Pentane 15
RL: TEM (Technical or engineered material use); USES (Uses)
(nonozone depleting blowing agents with trans-1,2-dichloroethylene for improving fire performance of urethane foam)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter ASTM E 1354
(2) Berrier, R; Polyurethanes Expo '98 1998, P5 CAPLUS
(3) Bob, J; The Earth Technologies Forum 1999, P273
(4) Dournel, P; Polyurethanes Expo '2001 2001, P325 CAPLUS
(5) Francesca, P; Environmental and thermal insulation requirements for polyurethane rigid foams for the professional cold chain industry 2001
(6) William, D; The Earth Technologies Forum 1998, P270
(7) Wu, J; Polyurethanes Conference Proceeding 2003, P144

L8 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:946394 CAPLUS
DN 138:24468
ED Entered STN: 13 Dec 2002
TI Compositions of hydrofluorocarbons and trans-1,2-dichloroethylene
IN Bogdan, Mary C.; Knopeck, Gary M.; Pham, Hang T.; Singh, Rajiv R.; Williams, David L.
PA Honeywell International Inc., USA
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C09K005-04
CC 23-3 (Aliphatic Compounds)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2002099006	A1	20021212	WO 2002-US17317	20020603
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002310266	A1	20021216	AU 2002-310266	20020603
	US 20030050356	A1	20030313	US 2002-161414	20020603
	US 6790820	B2	20040914		
	EP 1425363	A1	20040609	EP 2002-737330	20020603
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2001-295050P	P	20010601		
	WO 2002-US17317	W	20020603		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002099006	ICM	C09K005-04
	IPCI	C09K0005-04 [ICM,7]; C09K0005-00 [ICM,7,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C10M0171-00 [I,C*]; C10M0171-00 [I,A]
	ECLA	C08J009/14H2; C08J009/14H2+L75/04; C08J009/14H2F; C09K003/30; C09K005/04B4B; C10M171/00R; M10M; M10M; M10M; M10M; M10N; M10N; M10N
AU 2002310266	IPCI	C09K0005-04 [ICM,7]; C09K0005-00 [ICM,7,C*]
US 20030050356	IPCI	C08J0009-00 [ICM,7]; C08K0003-00 [ICS,7]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C10M0171-00 [I,C*]; C10M0171-00 [I,A]
	NCL	521/131.000; 252/067.000; 252/182.110; 510/408.000; 062/114.000; 134/010.000; 134/021.000; 134/022.120; 134/022.140; 134/042.000; 252/182.240; 252/182.270; 510/412.000; 510/415.000; 521/050.000; 521/117.000; 521/170.000
	ECLA	C08J009/14H2+L75/04; C08J009/14H2F; C09K003/30; C09K005/04B4B; C10M171/00R; M10M; M10M; M10M; M10N; M10N; M10N
EP 1425363	IPCI	C09K0005-04 [ICM,7]; C09K0005-00 [ICM,7,C*]
	IPCR	C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C09K0003-30 [I,C*]; C09K0003-30 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C10M0171-00 [I,C*]; C10M0171-00 [I,A]

AB The present invention provides compns. comprising ranges of an HFC component (a mixture of 1,1,1,3,3-pentafluorobutane and 1,1,1,3,3-pentafluoropropane) and trans-1,2-dichloroethylene having unexpectedly low and relatively constant b.ps. and uses of said compns. as propellants, foaming agents or.

ST compn hydrofluorocarbon dichloroethylene propellant foaming agent

IT Foaming agents
Propellants (sprays and foams)
Refrigerants
(compns. of hydrofluorocarbons and trans-1,2-dichloroethylene)

IT Hydrocarbons, uses
RL: NUU (Other use, unclassified); TEM (Technical or engineered material

use); USES (Uses)
(fluoro; compns. of hydrofluorocarbons and trans-1,2-dichloroethylene)
IT Boiling point
(low and relatively constant; compns. of hydrofluorocarbons and trans-1,2-dichloroethylene)
IT 156-60-5, trans-1,2-Dichloroethylene 406-58-6, 1,1,1,3,3-Pentafluorobutane 460-73-1, 1,1,1,3,3-Pentafluoropropane
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(compns. of hydrofluorocarbons and trans-1,2-dichloroethylene)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; WO 0238718 A2 2002 CAPLUS
(2) Kruecke; US 6080799 A 2000 CAPLUS
(3) Solvay; WO 0036046 2000 CAPLUS

L8 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:368615 CAPLUS
DN 136:371784
ED Entered STN: 18 May 2002
TI Compositions containing pentafluorobutane as solvents or refrigerants
IN Dournel, Pierre
PA Solvay (Societe Anonyme), Belg.
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C11D007-50
ICS C23G005-028; C09K005-04
CC 48-5 (Unit Operations and Processes)
Section cross-reference(s): 42, 45
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002038718	A2	20020516	WO 2001-EP12988	20011107
	WO 2002038718	A3	20030103		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2427777	A1	20020516	CA 2001-2427777	20011107
	AU 2002027915	A	20020521	AU 2002-27915	20011107
	EP 1341895	A2	20030910	EP 2001-989451	20011107
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004514025	T	20040513	JP 2002-542036	20011107
	CN 1529748	A	20040915	CN 2001-821754	20011107
	AU 2002227915	B2	20070628	AU 2002-227915	20011107
	US 20040013610	A1	20040122	US 2003-416062	20030507
PRAI	FR 2000-14514	A	20001108		
	WO 2001-EP12988	W	20011107		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002038718	ICM	C11D007-50
	ICS	C23G005-028; C09K005-04

	IPCI	C11D0007-50 [ICM,7]; C23G0005-028 [ICS,7]; C23G0005-00 [ICS,7,C*]; C09K0005-04 [ICS,7]; C09K0005-00 [ICS,7,C*]
	IPCR	C11D0007-22 [I,C*]; C11D0007-28 [I,A]; C08G0065-00 [I,C*]; C08G0065-00 [I,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,C*]; C09D0007-00 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,C*]; C11D0007-50 [I,A]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]; C23G0005-032 [I,A]
	ECLA	C08G065/00B2F; C08J009/14P; C08L071/02; C09D007/00B; C09K005/04B4B; C11D007/50A6; C11D007/50D2D; C23G005/028B
CA 2427777	IPCI	C11D0007-50 [ICM,7]; C09D0005-00 [ICS,7]; C23G0005-028 [ICS,7]; C23G0005-00 [ICS,7,C*]; C09K0005-04 [ICS,7]; C09K0005-00 [ICS,7,C*]; C08J0009-14 [ICS,7,C*]; C08J0009-00 [ICS,7,C*]
	IPCR	C11D0007-22 [I,C*]; C11D0007-28 [I,A]; C08G0065-00 [I,C*]; C08G0065-00 [I,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,C*]; C09D0007-00 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,C*]; C11D0007-50 [I,A]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]; C23G0005-032 [I,A]
AU 2002027915	IPCI	C11D0007-50 [ICM,7]; C23G0005-028 [ICS,7]; C23G0005-00 [ICS,7,C*]; C09K0005-04 [ICS,7]; C09K0005-00 [ICS,7,C*]
	IPCR	C11D0007-22 [I,C*]; C11D0007-28 [I,A]; C08G0065-00 [I,C*]; C08G0065-00 [I,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,C*]; C09D0007-00 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,C*]; C11D0007-50 [I,A]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]; C23G0005-032 [I,A]
EP 1341895	IPCI	C11D0007-50 [ICM,7]; C23G0005-028 [ICS,7]; C23G0005-00 [ICS,7,C*]; C09K0005-04 [ICS,7]; C09K0005-00 [ICS,7,C*]; C08J0009-14 [ICS,7]; C08J0009-00 [ICS,7,C*]; C09D0005-00 [ICS,7]
	IPCR	C11D0007-22 [I,C*]; C11D0007-28 [I,A]; C08G0065-00 [I,C*]; C08G0065-00 [I,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,C*]; C09D0007-00 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,C*]; C11D0007-50 [I,A]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]; C23G0005-032 [I,A]
JP 2004514025	IPCI	C09D0007-12 [ICM,7]; C09D0201-00 [ICS,7]; C09K0003-00 [ICS,7]; C11D0007-28 [ICS,7]; C11D0007-22 [ICS,7,C*]; C11D0007-50 [ICS,7]; C23G0005-032 [ICS,7]; C23G0005-00 [ICS,7,C*]
	IPCR	C08G0065-00 [I,A]; C08G0065-00 [I,C*]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,A]; C09D0007-00

		[I,C*]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,A]; C11D0007-50 [I,C*]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]
	FTERM	4H003/DA14; 4H003/DA15; 4H003/DC04; 4H003/ED19; 4H003/FA03; 4H003/FA45; 4H003/FA46; 4J038/CD121; 4J038/CD122; 4J038/CG141; 4J038/CG142; 4J038/DF022; 4J038/DL031; 4J038/DL032; 4J038/EA011; 4J038/EA012; 4J038/JA01; 4J038/JA09; 4J038/JA11; 4J038/JA26; 4J038/KA06; 4J038/MA08; 4K053/PA02; 4K053/QA04; 4K053/RA08; 4K053/RA32; 4K053/RA36; 4K053/RA37; 4K053/RA40; 4K053/RA41; 4K053/RA42; 4K053/RA48; 4K053/RA64; 4K053/YA03
CN 1529748	IPCI	C11D0007-50 [ICM,7]; C23G0005-028 [ICS,7]; C23G0005-00 [ICS,7,C*]; C09K0005-04 [ICS,7]; C09K0005-00 [ICS,7,C*]; C08J0009-14 [ICS,7]; C08J0009-00 [ICS,7,C*]; C09D0005-00 [ICS,7]
	IPCR	C11D0007-22 [I,C*]; C11D0007-28 [I,A]; C08G0065-00 [I,C*]; C08G0065-00 [I,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,C*]; C09D0007-00 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,C*]; C11D0007-50 [I,A]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]; C23G0005-032 [I,A]
	ECLA	C08G065/00B2F; C08J009/14P; C08L071/02; C09D007/00B; C09K005/04B4B; C11D007/50A6; C11D007/50D2D; C23G005/028B
AU 2002227915	IPCI	C11D0007-22 [I,C*]; C11D0007-28 [I,A]; C08G0065-00 [I,C*]; C08G0065-00 [I,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,C*]; C09D0007-00 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,C*]; C11D0007-50 [I,A]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]; C23G0005-032 [I,A]
	ECLA	C08G065/00B2F; C08J009/14P; C08L071/02; C09D007/00B; C09K005/04B4B; C11D007/50A6; C11D007/50D2D; C23G005/028B
US 20040013610	IPCI	A61L0009-04 [ICM,7]; F25D0001-00 [ICS,7]; C09K0005-00 [ICS,7]
	IPCR	C11D0007-22 [I,C*]; C11D0007-28 [I,A]; C08G0065-00 [I,C*]; C08G0065-00 [I,A]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C08L0071-00 [I,C*]; C08L0071-02 [I,A]; C09D0007-00 [I,C*]; C09D0007-00 [I,A]; C09D0007-12 [I,C*]; C09D0007-12 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; C09K0003-00 [I,C*]; C09K0003-00 [I,A]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]; C11D0007-50 [I,C*]; C11D0007-50 [I,A]; C23G0005-00 [I,C*]; C23G0005-028 [I,A]; C23G0005-032 [I,A]
	NCL	424/045.000; 252/067.000
	ECLA	C08G065/00B2F; C08J009/14P; C08L071/02; C09D007/00B; C09K005/04B4B; C11D007/50A6; C11D007/50D2D; C23G005/028B

AB Composition useful as refrigerant, heat-transfer fluid, blowing agent, toner fixing agent, drying solvent or degreasing solvent, comprises at least one hydrofluoroalkane having a b.p. ≥10 °C at 101.3 kPa such as 1,1,1,3,3-pentafluorobutane and at least one fluoropolyether having a b.p.

≤200 °C at 101.3 kPa such as Galden HT 55.

ST hydrofluoroalkane perfluoropolyether compn blowing agent; pentafluorobutane compn refrigerant heat transfer fluid; toner fixing agent pentafluorobutane compn; drying degreasing solvent pentafluorobutane compn

IT Blowing agents
Coating materials
Heat transfer agents
Refrigerants
(compns. containing pentafluorobutane as solvents or refrigerants)

IT Fluoropolymers, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(compns. containing pentafluorobutane as solvents or refrigerants)

IT Pigments, nonbiological
(fixing agents; compns. containing pentafluorobutane as solvents or refrigerants)

IT Polyethers, properties
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(perfluoro; compns. containing pentafluorobutane as solvents or refrigerants)

IT Fluoropolymers, properties
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(polyether-, perfluoro; compns. containing pentafluorobutane as solvents or refrigerants)

IT Degreasing agents
Drying agents
(solvent; compns. containing pentafluorobutane as solvents or refrigerants)

IT 156-60-5, trans-1,2-Dichloroethylene 406-58-6, 1,1,1,3,3-Pentafluorobutane 174127-34-5, Galden HT 70 206010-41-5, Galden HT 55 423756-05-2, Fomblin PFS 1
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(compns. containing pentafluorobutane as solvents or refrigerants)

IT 460-73-1, 1,1,1,3,3-Pentafluoropropane 138495-42-8, 1,1,1,2,3,4,4,5,5,5-Decafluoropentane
RL: TEM (Technical or engineered material use); USES (Uses)
(compns. containing pentafluorobutane as solvents or refrigerants)

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	44.34	53.72
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.00	-8.80

STN INTERNATIONAL LOGOFF AT 23:10:26 ON 05 SEP 2008